CLAIMS

1. A system for transplanting an image from a first scene to a second scene comprising:

first means for providing image data;

second means responsive to said first means for storing a first frame of image data consisting of a heterogeneous background scene;

third means responsive to said first means for providing a second frame of image data consisting of a second scene having said background scene at least partially obscured by a foreground object; and

fourth means responsive to said second and third means for processing said second frame to extract an image of said object independent of said background scene.

2. The invention of Claim 1 wherein said fourth means includes means for comparing picture elements of said second frame to corresponding picture elements in said first frame and replacing each pixel element with a predetermined value if the result of the comparison is a first value and outputting each picture element if the result of the comparison is a second value, wherein the second value is the complement of said first value.

3. The invention of Claim 1 further including means for inserting said image of said foreground object into a third scene.

4. The invention of Claim 3 wherein said third scene is computer generated.

5. The invention of Claim 4 wherein said first scene is static.

6. The invention of Claim 5 wherein said second scene is dynamic.

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7. A system for transplanting images comprising:

first means for providing image data;

second means responsive to said first means for storing a first frame of image data consisting of a heterogeneous background scene;

third means responsive to said first means for providing a second frame of image data consisting of a second scene having said background scene at least partially obscured by a foreground object;

fourth means for subtracting said first frame from said second frame and providing difference frame;

fifth means for processing said difference frame to provide a template; and

sixth means for multiplying said second frame by said template to extract an image consisting essentially of said foreground object.

8. The invention of Claim 7 further including means for inserting said image of said foreground object into a third scene.

9. The invention of Claim 8 wherein said third scene is computer generated.

10. The invention of Claim 9 wherein said first scene is static.

11. The invention of Claim 10 wherein said second scene is dynamic.

12. The invention of Claim 7 wherein said fifth means includes means for filtering said difference frame.

13. The invention of Claim 12 wherein said fifth means includes means for differentiating said filtered image.

14. The invention of Claim 13 wherein said means for differentiating provides an outline.

15. The invention of Claim 14 wherein said fifth means includes means for filling said outline with a value.

16. The invention of Claim 15 wherein said value is a logical '1'.

17. An image processing method for transplanting an image from a first scene to a second scene, said method including the steps of:

storing a first frame of image data consisting of a heterogeneous background scene;

providing a second frame of image data consisting of a second scene having said background scene at least partially obscured by a foreground object; and

processing said second frame to extract an image of said object independent of said background scene.